

**BYPASS AND INJECTION METHOD AND
APPARATUS FOR GAS TURBINES**

ABSTRACT OF THE DISCLOSURE

A bypass air injection scheme for a combustor of a gas turbine. Combustor includes a body with an inner liner and a casing enclosing the body with a passageway defined therebetween. A predetermined amount of the compressor discharge air passing through the passageway is extracted through a manifold. A conduit feeds the extracted air into an injection manifold having a plurality of injection tubes for injecting the extracted air into the combustor bypassing the reactor. The injection tubes and the injection manifold are disposed in a substantially common radial plane.